ABSTRACT

Thesis Title

: Demand for Tinplated and Galvanized Steel Sheets

Student's Name

: Mr. Wichai Kowarit

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Advisory Committee:

1. Assoc. Prof. Dr. Sunee Budsayavith

Chairperson

2. Assoc. Prof. Ati thaiyanan

3. Mr. Suthep Bunranakunaporn

The steel industy is a very important basic industry that provides rawmaterials to many other industries, such as the container, electronics and automobile industries. This study aims to analyze the factors that determined the demand for tinplated and galvanized steel sheets during 1976-1995. By minimizing cost with in the limit of output constraint, the derived input demand as a function of input prices and output quantity was obtained. The ordinary least squares (OLS) technique was applied to the linear and loq-linear multiple regressions.

During the period studied, the demand for tinplated steel sheet was statistically significantly determined by its price and volume of output (c.g. the seafood canning industry). The results showed that the demand for tinplated steel sheet was negatively related to its price with elasticity value at 0.45, and positively related to the quantity of canned seafood being produced; with elasticity value at 0.48. In the case of the demand for galvanized steel sheet, the results showed that demand was negatively related to its price with an elasticity value of 0.04, and positively related to the quantity of automobiles being produced; with elasticity

value at 0.76. The higher and lower values of the elasticities of demand for timplated steel sheet, with respect to price and income, may be due to the availability of other inputs used as substitutes.

Since over the period studied, all of the elasticity values were less then onc, changes in the prices and quantity of steel sheets produced would not have had immenes impacts on demand. The results support the hypothesis that tinplated and galvanized steel sheets are necessity goods in terms of both prices and income. The results lead to the conclusion that, as the supplier of steel sheets and basic rawmaterials for consumer goods, that development of the steel industry is highly dependent on the expansion of other industries.